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Lindsay Paterson

School of Social and Political Science, University of Edinburgh, Edinburgh, UK

ABSTRACT

A unique series of surveys of school leavers in Scotland (1952-98) is used to investigate long-term developments in the transition of young people from school. Transitions changed greatly in the half century, and varied by sex and socio-economic status. School attainment became increasingly important in giving school leavers access to post-school education, especially for female students and for students of low socio-economic status (SES). For low-SES and medium-SES students of both sexes, attainment also was important in gaining access to employment throughout the period. There was no evidence that the ending of selection into different kinds of secondary school had any immediate effect on transitions to education, training, or employment. However, there was evidence that reform to the school curriculum in the 1980s may have increased the proportions entering employment with or without training among low-SES students with relatively high attainment. At the same time, leavers with low attainment in that core curriculum benefited from the development of short, specifically vocational courses, though to a decreasing extent in the 1990s. Leavers who did not follow any such courses, and who had no core attainment, continued to face very difficult transitions.

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School leavers; youth labour market; comprehensive school; sex; social class

Introduction

Two aspects of social change and the resulting policy response in the UK in the second half of the twentieth century shaped the transition which young people made from school, and yet their relationship to each other has rarely been investigated. One consisted of the changes to the labour market for school leavers that started in the economic recession of the late-1970s, proceeded apace with the contraction of manufacturing industry in the 1980s, and was sustained by the growth of service-sector employment from the 1990s (Furlong and Cartmel 2007; Howieson and Iannelli 2008). These changes fundamentally altered the relationship between sex and progression, and also pushed to the margins the prospects of school leavers with low attainment whose families were of low socio-economic status. The policy response to this mainly took the form of special training schemes for school leavers, which gradually improved in quality over the 1980s and 1990s (Dolton, Makepeace, and Treble 1994; Jones 1988; Raffe 1984; Roberts, Dench, and Richardson 1986).

The other set of changes related to the structure of secondary schooling. The ending of selection for secondary school between the mid-1960s and the late-1970s was responding to earlier social changes than those which led to the changing labour market, mainly an expectation of equal

CONTACT Lindsay Paterson lindsay.paterson@ed.ac.uk School of Social and Political Science, University of Edinburgh, Edinburgh, UK

Supplemental data for this article can be accessed here.

opportunities and also a perceived need for a better-educated workforce (Ball 1990; McPherson and Raab 1988). This reform was particularly thorough in Scotland, and led to a new system of curriculum and assessment which was intended to cater for almost all students (Murphy et al. 2015).

The labour-market changes took place in the context of these changes to schooling, and in Scotland the policy responses tried to make new vocational training consistent with the liberal education that was at the core of the comprehensive curriculum. However, despite the extensive research in many countries on both the changes to transitions and the changes to the format of schooling, there has been little research which has investigated the interaction of the two processes. Because of the long time-scale over which both processes took place, any analysis has to take a long view. In the UK, the comprehensive reforms may be said to have lasted from the 1960s until the final reforms to the curriculum of compulsory schooling in the early 1990s. The changes to youth transitions lasted from the mid-1970s until the end of the century. To be able to comment on either of these changes requires also a baseline before they started. The analysis reported here covers all these periods, by using a uniquely long time series of school leavers in Scotland, stretching from the beginning of the 1950s to the end of the 1990s.

Taking Scotland as the focus is not only because this evidence exists. The country also allows a test of whether an academic type of secondary curriculum could respond to the labour-market changes in a way that would further the opportunities of students with the full range of attainment and socio-economic status. This historical test is of particular interest for claims that academic schooling is inimical to low-status groups (claims that have been common since the 1960s: Paterson 2015). Scottish education saw a large rise in the rate of participation in academic courses at school and in academic higher education (Iannelli 2007). The question then is whether that kind of experience was consistent with providing opportunities for all.

Literature review

Until the middle of the 1970s, the transitions which school leavers in the UK made were quite predictable (Bynner et al. 2002; Bynner and Parsons 2001; Furlong and Cartmel 2007). Apart from the minority who entered higher education, the immediate destination was work. Many then had the possibility of part-time training, whether at the training colleges that had been established after the late-1940s, or, especially for men, an apprenticeship (Paterson et al. 2010). In this respect the formal training opportunities for young people in the 1950s were better than for previous generations (Hannan et al. 1995). A large proportion of women left the labour market in their twenties to form a family. These patterns for women and men were common to most developed economies (Furlong and Cartmel 2007, 36–7). But then the labour market for school leavers collapsed, causing youth unemployment to rise rapidly from the late-1970s, in the UK reaching over 20% in the early 1980s (Bynner 2012).

One reason for the economic problems was cyclical, with a rise of unemployment in the 1970s that was greater than any since 1945, followed by a fall during the economic boom in the late-1980s and then a rise again in the 1990s (Broadberry 1994, 242). The experience was similar across OECD countries (Furlong and Cartmel 2007, 37), and affected young people more acutely than other groups – sharper rises of unemployment in recessions, and more rapid falls during expansions (Furlong and Cartmel 2007, 37). Policy responses to this source of youth unemployment tended to emphasise the importance of human capital as a form of insurance against short-term unemployment. For young people, remaining in education beyond the minimum leaving age during a recession might not only strengthen their qualifications (and thus their competitive position) but also postpone labour-market entry until the economy recovered (Hasluck 1999; Shelly 1988, 102–5).

The second reason for the more difficult employment market for school leavers in the 1970s and 1980s was the decline of manufacturing industry, with the loss of opportunities for training that were generally not replaced in the new service sector which grew from the 1980s onwards (Chisholm 1999; Gangl, Müller, and Raffe 2003; Paterson, Bechhofer, and McCrone 2004, 47–9; Solga 2008). This

change was not cyclical, but long-term. Thus merely postponing entry to the labour market would not allow a school leaver to escape the consequences of the structural changes. Because men had been concentrated in manufacturing, and women were more likely than men to work in services, there was a strong impact on sex differences in employment and training. In the 1980s, a larger proportion of male than of female school leavers were unemployed, but a lower proportion of women than of men took part in training (Crawford et al. 2011; Smyth 2005) and the labour-market consequences of having low attainment from school were more severe for women than for men (Howieson and Iannelli 2008, 286). The overall participation of women in the labour market grew rapidly in the 1980s, partly in a delayed form by means of rising female participation in post-compulsory education (Egerton and Savage 2000).

A growing proportion of school students remained in education beyond the minimum leaving age (Bynner 1999). Governments in many countries also tried to respond more deliberately with new training schemes for those school leavers who were not entering higher education (Bynner and Parsons 2001; Dolton, Makepeace, and Treble 1994; Furlong and Cartmel 2007, 41–2). In the UK, the first schemes (from 1975 onwards) were criticised as merely being a way of keeping young people out of unemployment. To an extent, that was indeed what they were intended to do, insofar as there was still an expectation that the recession was cyclical and that employment would return to normal levels and patterns in due course. When youth unemployment appeared to be more persistent, the training schemes became better organised, but still did not match the lengthy apprenticeships that had been a feature of predominantly male training in the 1950s and earlier. The Youth Opportunities Programme, introduced in 1978 by the UK Labour government, gave only six months of work experience, and the first version of the Youth Training Scheme (YTS), introduced by the Conservative government from 1981, gave only a year of training. The controversies around the inadequacy of these came to be linked with the controversies around the collapse of manufacturing industry which was happening at the same time, and which criticism of the government alleged to have been exacerbated, or at least accelerated, by the recession which had been provoked by their moneterist policies. Because that government also placed strong emphasis on supply-side responses to the recession, they took these criticisms seriously, extending the YTS to two years from 1986 (Raffe 1984). Nevertheless, the scheme remained controversial because the pay for trainees was low, and because it did not lead to any guaranteed employment (Bynner 2012). Versions of that scheme remained in place until the end of the century, but the Labour government elected in 1997 did introduce a minimum wage, and encouraged the development of modernised forms of apprenticeship. Through the cyclical economic expansion which had started from the mid-1990s, the employment prospects of people who had been on the YTS and its successors were improved (Bynner 1999, 67; Croxford 2015, 130–1; Eurydice 1997, 82–5; Main and Shelly 1988), although the effect may have been stronger for women than for men (Dolton, Makepeace, and Treble 1994).

The conclusion of research on vocational education of this kind has been that it did help low-attaining young people to avoid unemployment and low-status jobs (Crawford et al. 2011; Arum and Shavit 1995). For low-status and low-ability young people, vocational qualifications even of a minimal kind were helpful in the labour market (Dearden, McGranahan, and Sianesi 2004) Even low levels of training could make a difference to young people's employment chances by their early twenties (Howieson and Iannelli 2008). Solga (2008) found that, in the UK, the reason why the employment chances of young people with low-level vocational qualifications were poor was not related to the quality of that training. Rather, it was because of displacement – the jobs they might have entered being taken by the growing number of better-qualified school leavers – and because they lacked the social networks to enter the labour market effectively.

Therefore entering training of some kind after leaving school became, in the 1980s, a desirable goal in the UK for leavers who were not entering higher education, a proportion that remained well over one half. That goal was particularly relevant for students of low socio-economic status because they were much more likely than high-status students to leave school with minimal attainment. The policy questions also then related to how schools could enable these changes to happen. In one

sense, this was implicitly a goal of the move to a non-selective system of secondary schools, insofar as one of its aims was to improve the employment prospects of people from all social backgrounds (Kerckhoff et al. 1996; McPherson and Willms 1987). The whole of the public secondary system in Scotland became comprehensive by the late-1970s, although around 5% of pupils attended selective schools that were independent of public management. That reform probably increased attainment, encouraged staying on beyond the minimum leaving age (which was raised to 16 in 1973), and reduced social-class and sex inequality of attainment. However, the greater direct impact on school leavers' prospects in the labour market came from the reforms to the curriculum that were a corollary of this structural change (Croxford 1994; Gamoran 1996; Paterson 2020a). From the second half of the 1980s, these new Standard Grades provided meaningful courses and assessment for almost the full range of ability for the first time.

Although school vocational education was never as coherently organised as that, there were also other kinds of course that were directed especially at low-attaining students. In the immediate aftermath of the introduction of comprehensive schooling these were generally called non-certificate courses, because they did not lead to any nationally recognised assessment. Their somewhat unsatisfactory nature led some schools to use the Certificate of Secondary Education, an English scheme for low-attaining students. All such provision came to an end in Scotland with the advent of Standard Grade. By then, however, a mainly vocational set of courses and certificates had been introduced from 1984 (Raffe 1985). These National Certificate modules rapidly became popular in schools as a way of providing pre-vocational training. The policy document which introduced them propounded, as Howieson et al. (1997, 13) put it, 'a liberal educational philosophy which rejected any abandonment of broadly-based education at 16', and thus was intended to be compatible with the principles of liberal education that underpinned the Standard Grade reforms.

There has been a large volume of research on all of these topics, but there has been very little – in any country – which has brought together evidence about the changing transition from school and evidence about the effects of comprehensive schooling. In Scotland, the analysis of comprehensive schools has concentrated on changes to progression and attainment within the core school curriculum (Croxford 1994; McPherson and Willms 1987; Gamoran 1996), and analysis of reforms to vocational education has taken the comprehensive reform as a given part of the context rather than as an evolving system that potentially might shape in changing ways young people's transition to their first destination after leaving school (Croxford 2015; Howieson et al. 1997). Yet the wider research on vocational training gives reason to believe that the structure of schooling and its courses might have an effect on school leavers' transitions. Many writers have noted that policy and tradition in the UK have preferred general rather than vocational qualifications at school as a preparation for entering the labour market (Gangl, Müller, and Raffe 2003, 279; Müller and Shavit 1998). The UK shares this with some other northern European systems, though not with, for example, Germany and the Netherlands where secondary schooling is divided into academic and vocational tracks. Scotland is, if anything, even more firmly attached to general education than the rest of the UK (Howieson et al. 1997, 17), and came to that position on grounds similar to those outlined by Allmendinger (1989) that standardisation of the academic curriculum and assessment within common school structures was the most effective way of making opportunity less unequal. Iannelli and Duta (2018) have confirmed, for Scotland, that less academic curricula have no particular benefit for any social group, and Moulton et al. (2018) found, for England, that these harm the prospects of female students and of white students.

Our broad research question is to investigate whether the reforms to secondary schooling had any impact on the transitions which students made when they left school. Specifically, we ask:

(1) Over the full half century, were there changes in the social-class and sex differences in the immediate transitions upon leaving school?
(2) Were these differences affected by the structural changes to schooling that came with the ending of selection?

(3) Were these differences affected by the curricular changes in schools which followed from the structural changes?

Data and methods

We use 11 surveys of people conducted around the time that they left school, and which we refer to by the year when their members turned 16: 1952, 1974–6, 1976–8, 1978–80, 1980–2, 1984, 1986, 1988, 1990, 1996, and 1998. These surveys have been used in several of the publications cited above, but not hitherto as a single series. The 1952 survey was a birth-cohort study (Paterson et al. 2010). The surveys 1974–6 to 1980–2 were leaver surveys. The 1974–6 survey covered pupils with the full range of attainment only in five regions of Scotland, which included around three quarters of all pupils (Gray, McPherson, and Raffe 1983, 16–23); only that part of the survey is used here. The surveys from 1984 onwards were cohort surveys, based on a sample of students in the fourth year of secondary school who were then followed up over the subsequent years (Croxford, Iannelli, and Shapira 2007, 7). The response rates at the relevant sweeps ranged from 98% in the 1952 survey, through around 80% for the leavers' surveys between 1974–6 and 1980–2 (McPherson and Willms 1987), to around 65% for the surveys from 1984 onwards (Croxford, Iannelli, and Shapira 2007).

The outcome variable classifies the destination of students within about a year of leaving school. There are six categories, recording the main activity which the respondent was undertaking; the relative sizes of these over time are shown in Table 1 below:

(1) Not education, training, employment or looking for work
(2) Unemployed and looking for work
(3) Employed without training
(4) Employed with short training (including government training schemes)
(5) Employed with long training
(6) Education

The survey questions from which this is constructed varied, but had enough in common to allow a consistent definition at this level of generality. Category 6 was confined to people who said that their main activity was education, whether or not that was full-time. (It thus includes the category which Wolbers (2003) calls 'working student', for example students who had a part-time job to cover their expenses.) Unemployed people were allocated to category 1 or 2 depending on whether they were looking for work. Anyone whose main activity was employment was allocated to categories 3, 4 or 5, even if the employment was part-time; few of the surveys distinguished between part-time and full-time work. Categories 4 and 5 contained respondents who reported ever having been on any kind of training or course since leaving school. Because of the varying form which the survey questions about training took, the distinction between short and long training had to be something of a compromise. Long training consisted of apprenticeships (all years), attending courses at colleges or training centres (1984–98), or training that lasted longer than a year (1976–8). Thus short training consisted of courses lasting less than a year, on-the-job training, and – most notably, from the 1978 survey onwards – the special training schemes provided by government, of whatever length. Other researchers have investigated this distinction in detail by restricting attention to particular periods of time when such provision was changing (Dolton, Makepeace, and Treble 1994; Main and Shelly 1988). Our intention here is to track over time the aggregate effects of these broad categories of opportunity for part-time training. Thus category 4 is defined as widely as possible, leaving category 3 to be strictly defined in a residual way as people in work who have done no training or education of any kind since leaving school. Our data do not allow us to investigate whether employment with training at this stage of young people's lives led to worthwhile employment later.

Table 1. Destinations around nine months after leaving school, by sex, 1952–1998.

Year when respondent was aged 16	Not education, training, employment or looking for work	Unemployed and looking for work	Employed without training	Employed with short training	Employed with long training	Education	Sample size (=100%)
Male							
1952	0	0	61	0	33	6	554
1974–6	3	13	25	8	38	13	7,817
1976–8	2	7	21	16	38	15	4,170
1978–80	1	15	15	23	29	18	9,932
1980–2	4	16	7	33	22	20	3,078
1984	3	15	6	38	21	17	1,800
1986	3	15	11	39	14	19	1,702
1988	2	6	14	42	14	22	1,542
1990	4	11	12	33	12	29	1,083
1996	4	8	18	19	6	46	780
1998	2	8	9	21	12	47	1,540
Female							
1952	1	0	93	0	4	2	597
1974–6	4	12	30	21	14	19	8,115
1976–8	3	7	36	21	11	23	4,461
1978–80	2	12	26	28	7	26	10,944
1980–2	7	14	9	39	3	28	2,947
1984	4	13	10	35	17	20	1,989
1986	5	11	15	35	13	21	2,095
1988	4	6	15	35	11	28	1,759
1990	8	9	14	26	8	36	1,433
1996	6	7	19	17	5	46	1,189
1998	4	6	13	17	7	52	2,137

Percentages are weighted; sample sizes are unweighted.

There are five control variables. Two of these relate to attainment. The main one is a record of the respondent's number of awards in mid-secondary or senior-secondary courses, a measure which has been widely used in previous research on the Scottish school leavers' surveys (Croxford, Iannelli, and Shapira 2007, 54; McPherson and Willms 1987, 515). The mid-secondary courses were Lower Grade (in the 1952 survey), Ordinary Grade (surveys in 1976–90), and Standard Grade (1986–98). The senior-secondary courses were in the Higher Grade (referred to here by their colloquial name of the Highers). This variable also implicitly controlled for staying on into post-compulsory schooling, because the higher levels of attainment corresponded to courses that are nearly always taken by students after they have passed the minimum leaving age. (Hannan et al. (1995) show that a variable recording years of schooling is less meaningful than a variable recording attainment.)

The other attainment variable is a dichotomous indicator of whether, in addition to this, the respondent took at least one low-level course (as described above). These were defined to be taking any non-certificate course (1974–6 and 1976–8 surveys), any CSE course (1980–90), or any National Certificate module (1984–98). Because no such courses existed for the 1952 school leavers, that survey is omitted from models which include this variable.

A variable recording sex is available in all surveys. Parental education, for each parent, is summarised into: left full-time education at 15 or younger, at 16, or at 17 or older. For social class, we use the Registrar General scheme. This measure is not ideal sociologically, but is all that is available for the 1952 survey. Because mother's class is not available for four of the 11 surveys, we use only father's class.

In the sex variable, all weighted proportions were 49–51% except in 1952, when 48% were male. The socio-economic measures changed over time in familiar ways. For example, the weighted proportion of students who had at least one parent educated to age 17 or older was 4% in 1952, 11% in 1980 and 34% in 1998. The proportion with a father who worked in classes I or II (professional

or semi-professional) was 12% in 1952, 21% in 1980 and 30% in 1998. The base of all the tables omits respondents for whom sex, attainment, or the school name were not known (3% of all respondents to the relevant sweeps of the surveys). Missing information on social class or parental education is included as a category in the corresponding variable. The proportion missing for social class was between 13% and 23%, except in 1952 when it was 1%. The proportion missing education for both parents ranged from 5% to 16%.

The surveys recorded information on the last school attended, and we use this to classify schools in two ways. The first classification follows McPherson and Willms (1987) in grouping schools according to whether they were comprehensive when the members of the 1974–6, 1978–80 and 1982–84 surveys entered them:

(1) The 'early comprehensives' are those which had a non-selective intake in 1970 (when the oldest member of the first survey entered) and continued to have a non-selective intake through the other two surveys.
(2) The 'middle comprehensives' still had a selective intake in 1970, but had a non-selective intake in 1974 (when the oldest members of the second survey entered) and continued to have a non-selective intake in the final survey.
(3) The 'late comprehensives' still had selective intakes in 1970 and 1974, but had a non-selective intake in 1978, when the oldest members of the third survey entered.

This classification closely follows McPherson and Willms (1987, 521–3) in assessing the ending of selection as a quasi-experiment. Controlling statistically for school attainment, socio-economic status and sex is then a substitute for random allocation. If, after these controls, the employment prospects of low-attaining school leavers grew between the late-1970s and the mid-1980s more in group 2 than in group 3, then we might attribute that to the move to non-selective status in group 2. Similarly, group 1 acts as a control for the other two because its non-selective status is constant.

As percentages of all members of any of these three surveys, these groups contained respectively 47%, 27% and 5%. The omitted schools from models using this classification are in four groups: schools that were independent of public management (3%), schools founded after 1978 (0.6%), and schools that were not fully comprehensive by the time that the oldest members of the 1984 survey entered. A quarter of that last group were in schools that gave only four years of secondary education, after which some of their pupils had the opportunity to transfer to a six-year school, and two thirds were in the schools to which these pupils transferred. (The remainder were in schools that were still in the last stages of ending selection in 1978.) That arrangement persisted in some sparsely populated areas where six-year schools were not viable.

This form of inference does not depend on the three groups' being representative nationally, because they are being compared with each other, and because of the controls. However, they are in fact quite close to the national pattern of socio-economic status, sex and attainment. For example, 51% were female in both the included and omitted schools, 18% and 22%, respectively, were in social classes I&II, 6.4% and 8.3% had mothers who left school at age 17 or older, 43% and 40% had no formal certification, and 25% and 24% had passed at least one Higher.

The second classification similarly follows Gamoran (1996) in grouping schools according to their rate of transition to the new Standard Grade courses between the 1984 and 1990 surveys. All schools are included except independent schools (for which this measure is not available). Three groups are defined in terms of the extent to which, in 1988, they had adopted the new courses in English, which was taken by almost all pupils in the compulsory years of secondary school. The year 1988 is chosen as the survey year in which the new and old English courses were approximately in balance across all schools (as noted by Gamoran 1996, 6–8). The groups are, with proportions of survey respondents in 1988:

(1) Early reformers: schools which provided only the new courses in English (14%).
(2) Middle reformers: schools which provided both the old and new courses (44%).
(3) Late reformers: schools which provided only the old courses (41%).

As with the variable recording the ending of selection, this variable is used to define a quasi-experiment. The groups are taken to indicate the rate of engagement with the new curriculum. Thus, in comparing the groups, it is not assumed that they measure the specific effect of English courses, but rather that they reflect a general orientation to curricular innovation. Moreover, by looking also at the longer history of each group, we can show whether, say, the early reformers were already distinctive before the innovation was introduced.

We model the outcomes by binomial logistic regression, and report the results as chi-squared tests and as predicted proportions attaining each specified threshold. There are three kinds of model:

Model 1:Across the whole sample, whether the respondent was in education (category 6 of the outcome variable compared to categories 1–5).

Model 2:For respondents who were not in education, whether they were in a job with some kind of training (categories 4 and 5 of the outcome variable compared to categories 1–3). This is also repeated for category 5 against 1–4.

Model 3:For respondents who were not in education or in employment with training, whether they were in a job (category 3 of the outcome variable compared to categories 1–2).

This approach thus recognises the ordered hierarchy of outcomes. The reason we have not used models for ordered categorical data is that these require restrictive conditions which are difficult to satisfy (Aitkin et al. 2009, 298–310). The reason we have not used multinomial models (with the three dichotomies as outcomes) is that these require a single reference outcome, for example comparing being in education to being in the category 'other'. For our purposes, the more meaningful comparison for each outcome is with all people who did not achieve that outcome.

The modelling was done in R using the package 'svyglm'. This allowed weights to be taken into account. For all the surveys from 1974–6 to 1998, there were post-stratification weights to compensate for varying rates of response; the weighting categories were sex by attainment (Gray, McPherson, and Raffe 1983; Croxford, Iannelli, and Shapira 2007, 7). For several surveys, the sampling fraction also varied by attainment and by region, and so the weights take account of this design. The sampling fraction varied by year, and so the weights were standardised to have the same sum in each year (which affects the predicted proportions but not the effective sample sizes for the tests). In models where our explanatory variables are categories of schools, we include school as a clustering variable, which is equivalent to using a multilevel model where the intercept term varies among schools. The model statistics are shown in online supplementary material by means of Type II chi-squared tests, which are the results of dropping each term in turn from the model shown in the table.

We show detailed results by means of predicted proportions in the various destinations, in order to allow valid comparison of models for different destinations. (Comparing logistic regression coefficients for different models is not valid (Mood 2010).) To avoid excessive complexity, the predictions show three levels of socio-economic status corresponding to the three grouped levels of class in the models and the modal level of parental education for that class group in that year. That was age 15 for all classes in 1952. Thereafter, for group I and II it was both 17; for the other groups it was age 15 up till 1990, and then age 16 in 1996–8. The standard errors for the comparison of mean predictions are derived from the full covariance matrix of the predictions ('vcov' in R).

Analysis

Table 1 summarises the large changes between 1952 and 1998 in students' immediate destinations after leaving school, separately for males and females. In the 1950s, over 90% of leavers of both sexes entered employment, but, whereas 33% of males had some training, only 4% of females did so. There were two notable developments from the 1970s onwards. The more long-lasting was the growth of

entry to education. By the late-1970s, the male proportion had risen from 6% to just under 20%, while the female proportion had risen from 2% to over 20%. There was a plateau in the 1980s, after which the proportion doubled to around one half by the end of the century. These post-school education courses took a variety of forms, with a growing share in higher education (Iannelli 2007).

The other main change in Table 1 is in employment with training. From the 1950s to the mid-1980s, there was a large rise in the proportion of leavers in work who had had some training. There were two influences here. One, for women, was the steady growth of employment with training before the 1980s, reaching around one half of women entering employment in the second half of the 1970s. Most of that growth was in short training. The proportion for any training was much closer to the corresponding male proportion at that time (about two thirds) than in the 1950s, but there continued to be a marked difference in long training. The other influence then came from the various policy responses to the growth of youth unemployment, which itself is evident from the table (unemployment reaching a peak of about one in six in the early 1980s). For both men and women, a large majority of those who entered employment had had some training in the mid-1980s, predominantly of a short kind. Short training fell by about a half by 1998 from its peak in the late-1980s. Over the whole series, the proportion of women with long training was always less than the proportion of men, but the gap reduced.

Changing role of school attainment

Our more detailed statistical analysis now investigates how these trends relate to socio-economic circumstances, and whether any of the changes might relate to policy on school structures and the school curriculum. Table A1 (supplementary material) summarises statistical models of the dependent variables in relation to time, school attainment, sex, social class, parental education, and the interactive effects among these. Because the models control for attainment, any effects of the other variables are over and above their effects on attainment. These prior effects were large and changing in this period, as investigated elsewhere (Paterson 2020b): sex differences were transformed, with female students moving on average from lower to higher attainment than males; and there was some fall in socio-economic inequality.

Figure 1 summarises the statistical effects of school attainment on entering post-school education, showing this separately for males and females and for the three categories of socio-economic status. Unsurprisingly, students with higher school attainment had higher proportions entering education upon leaving school. However, the most striking feature of the graphs is the interactive effect with sex and SES. Between the 1950s and the 1970s, school attainment came to matter much more for women at all levels of SES than it had done, insofar as the attainment lines become more separated. The same was true for low-SES men between the 1980s and the 1990s. (Detailed statistical tests confirming these and other comments on the graphs are in the supplementary material.)

Figure 2 analogously summarises experience of entering employment with any kind of training among those people who were not in education a year after leaving school. There was little difference by attainment up to the early 1980s, although some indication in this period that, for low-SES students, having high school attainment was somewhat more likely to lead to employment with training than having low attainment. This position was then reversed in the late 1980s, when entry to employment with training became more common at low attainment than at high attainment.

But this greater propensity of lower attainers than of high attainers to enter training was largely a matter of entering short training. An analogous graph for entering long training showed no such reversal: the pattern was closer to that for entering education (as in Figure 1), with higher rates among higher attainers. Similarly, the effect of school attainment on directly entering employment was positive from the 1970s onwards for low-SES and medium-SES school leavers:.

In short, there was a growth in the association of high levels of school attainment with entry to post-school education, to lengthy training, or to employment without training, but there was a decrease in the association of higher school attainment with entry to employment with short training.

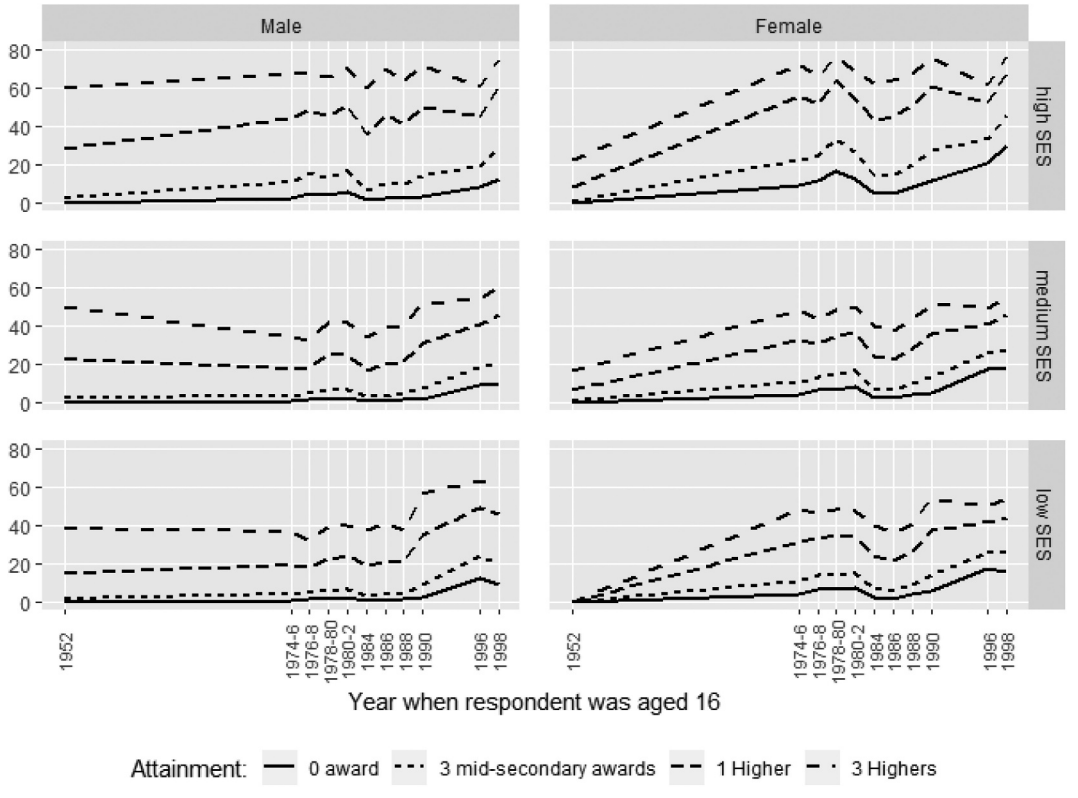


Figure 1. Percentage in post-school education, by socio-economic status, sex, and school attainment, 1952–1998. Source: predicted values from model 1 in Table A1 (supplementary material).

End of selection for secondary school

Table A2 (supplementary material) summarises the statistical effects of the variable which groups schools into three periods of ending selection, showing only those parts relating to that variable. Detailed examination of the predicted proportions showed that there was no consistent difference between these school sectors in the average proportion entering post-school education. However, there was evidence of differences with respect to entering employment with or without training.

The pattern for employment with training is shown in Figure 3 for people with no awards in school examinations. There is some evidence that the rate of entering employment with training was highest in the last group of schools to end selection, though only for low-SES and medium-SES students in the years immediately after the ending of selection (1982–86): for these two groups, the solid lines are above the other lines in that period. But there is also evidence that these schools already had a good record in that respect for medium-SES students before the reform, insofar as they were ahead for them also in 1976. There was no such prior gap for low-SES students. So the possibly beneficial effects on training opportunities which these schools conferred on medium- and low-SES students who had very low attainment may have been an interaction between the reform and a longer-term history. Moreover, there was no effect on entering long training (as Table A2 summarises: none of the statistical effects of 'reform phase' on long training is significant). So any effect was on short training: the late-reforming schools were able to take advantage of the government training programmes in the mid-1980s, but seem to have had no such affinity with more substantial programmes of training.

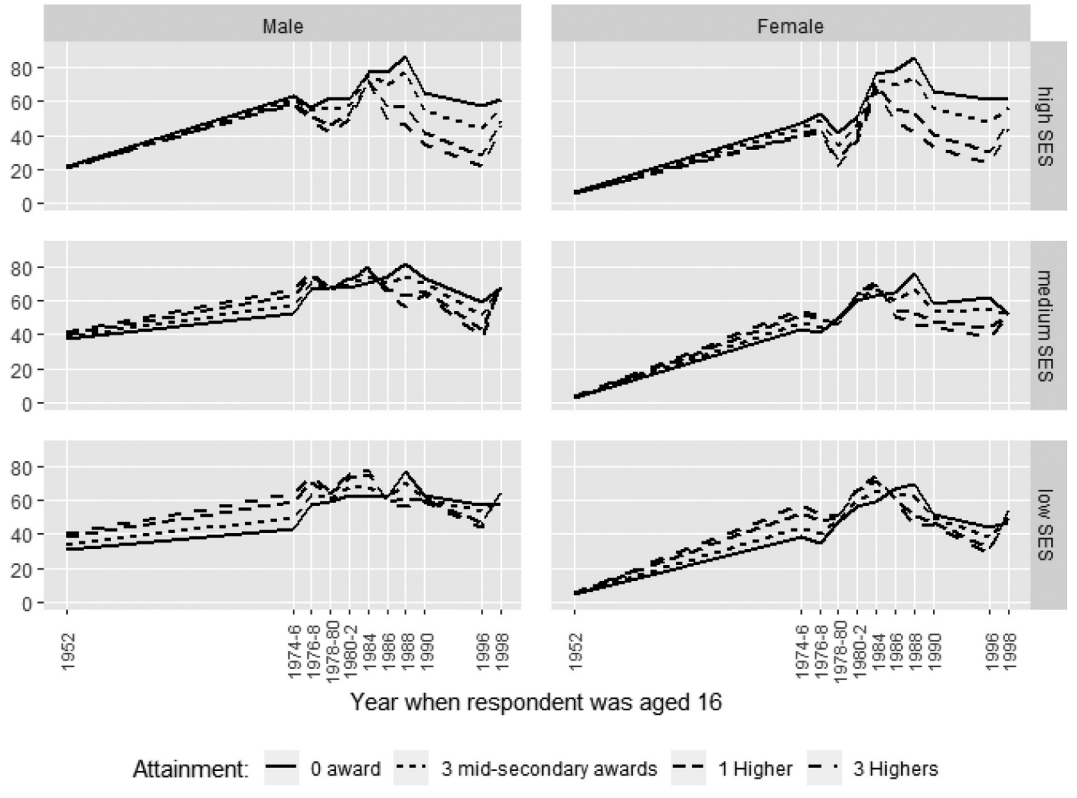


Figure 2. Percentage employed with any training, by socio-economic status, sex, and school attainment, 1952–1998, among people who were not in post-school education. Source: predicted values from model 3 in Table A1 (supplementary material).

These schools also may have conferred an advantage for getting people into jobs even without training, but the evidence is weaker because the sample sizes are smaller when confined to people who did not have any training and did not enter post-school education.

What is certainly clear from this analysis of the phases of transition to ending selection is that there is no evidence that pioneering comprehensive schools (the first group) were particularly effective in any respect, even when compared to schools that remained selective in the second half of the 1970s. This was true of getting their leavers into post-school education, or into employment with training, or into employment without training.

Reform to the curriculum and assessment

The curriculum and assessment were reformed in the second half of the 1980s; relevant models are summarised in Table A3 (supplementary material).

For entry to post-school education, the late reformers appear to have been most effective for medium- and low-SES students who had relatively high attainment from school. There were no such difference for high-SES students, nor, at any level of SES, for students with no formal attainment.

In contrast, for entering a job with training immediately after the reform (in 1990) the advantage lay with the early-reforming schools, but only for low-SES students who had relatively high attainment. There was a similar advantage for early reformers in directly entering employment. For both these outcomes, the advantage of the early reformers was lost later in the 1990s when the other schools also reformed. A weaker version (not statistically significant) of the same pattern was found for entry to long training: the schools which were pioneers of the curricular reform were somewhat

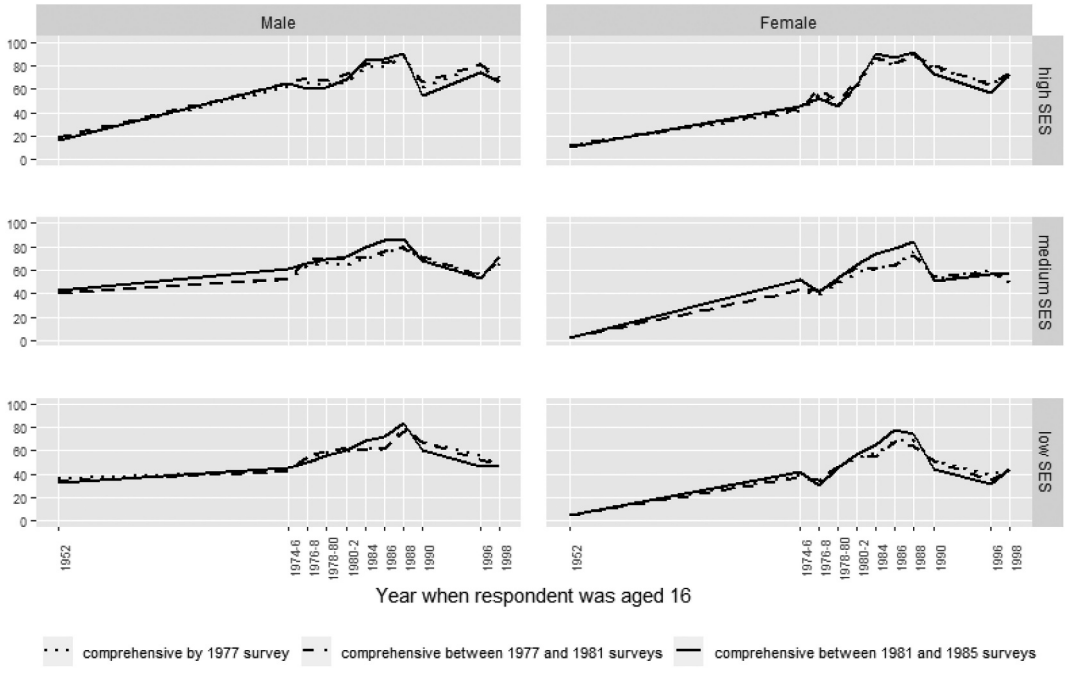
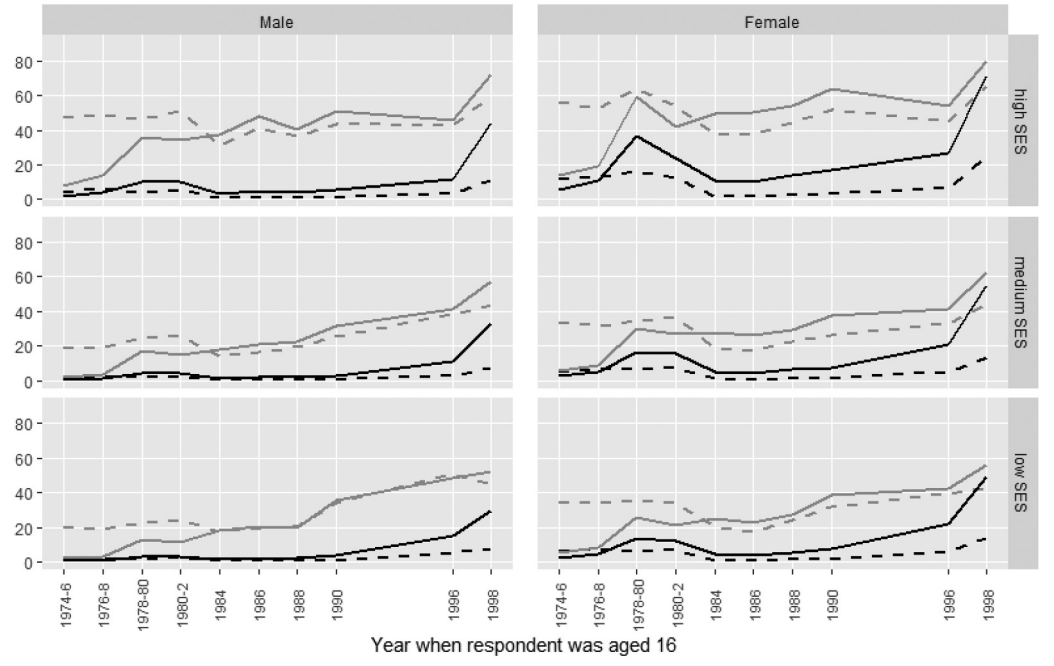


Figure 3. Percentage employed with any training, by socio-economic status, sex, and trajectory during the transition to comprehensive schooling, 1952–1998, among people who were not in post-school education. Leavers with no awards at mid-secondary level. Source: predicted values from model 3 in Table A2 (supplementary material).

more effective than other schools at getting high-attaining, low-SES students into long training. Thus pioneers of the curricular reform appear to have been particularly effective at enabling their low-SES students with relatively high attainment to enter jobs with training or jobs without training; the later reformers then caught up. For entering post-school education, however, the advantage for low-SES students was with the late-reforming schools, which maintained that advantage after the reforming period.

The final models relate to a further aspect of curricular reform, the development of low-level courses. The models are summarised in Table A4 (supplementary material). Figure 4 illustrates their association with entering post-school education. In this graph, the effect of low-level courses is the contrast between broken and solid lines; the effect of formal attainment is the contrast between black and grey lines. The pattern is of steadily strengthening association of this outcome with having completed a low-level course, especially for leavers with no awards in the main school courses (black lines). When the low-level courses were only non-certificate (in the 1970s) or only CSE (1980–82), the statistical effect was generally negative at high overall attainment (grey lines), in the sense that people who took a low-level course (solid line) had lower proportions entering education than people who did not (broken line). However, for female students with no awards in the main courses (black lines), the line in the graphs for having taken a low-level course (solid line) moved above the line for not having done so in 1978–80, which would be consistent with there having been a targeted use of CSE with such students. Especially from the advent of the vocational modules in 1984, the line for low-level courses shows an advantage, especially for students who had no formal attainment (black lines).



Key:

Solid = any low-level course; broken = no low level course

Black = no formal attainment; grey = passed 1+ Highers

Figure 4. Percentage entering post-school education, by socio-economic status, sex, attainment, and whether took a low-level course, 1976–1998.
Source: predicted values from model 1 in Table A4 (supplementary material).

Low-level courses also had a positive effect on entering jobs with training among people with no formal attainment, though without the effect of CSE in 1980. Unlike with post-school education, there was a diminishing effect in the late 1990s. This was an effect on short training only, because it was not found for entry to long training. The same positive but reducing effect was true for entering jobs without training and who had no formal attainment.

Conclusion

The strength of this analysis is in the length of time which the surveys cover, from the stable period of the former selective system in the 1950s, through the transition to comprehensive schooling in the 1970s, the transformation of the youth labour market between the late-1970s and the mid-1980s, and the reforms to curriculum and assessment in schools in the late-1980s and 1990s. The surveys allowed a broadly consistent classification of destinations in the year after leaving school, as well as providing information on students' school attainment and demographic characteristics. Schools could be classified according to when they ended selection and to when they adopted the reformed curriculum, thus enabling an investigation of whether these reforms may have had an effect on school leavers' transition. The main weakness of the analysis is any information on the local labour-market conditions faced by school leavers at each of these points in time. Local conditions might be particularly relevant to leavers with low attainment from school. Nevertheless, detailed investigation

of local conditions in the 1980s has suggested that these were not the main influences on leavers' decisions to leave school, which were more strongly associated with factors that were common to all localities (Paterson and Raffe 1995).

The data have allowed us to bring together two areas of research that have rarely been investigated at the same time – the transition to comprehensive secondary schooling and the changes to youth labour markets. We have thus been able to examine the educational precursors to entering vocational training when shortened versions of it expanded in the 1980s, and to ask how the educational reforms related to the vocational reforms. We were also able to set these changes in the context of the strongly rising rates of participation in post-school education as distinct from the training that was provided to school leavers who entered employment.

On our first research question, the analysis reported here has shown that transitions from school changed very greatly in the half century, and that these changes varied by sex and socio-economic status. School attainment became increasingly important in giving school leavers access to post-school education, especially for female students and for low-SES students. For low-SES and medium-SES students of both sexes, it also was important in gaining access to employment throughout the period. Access to employment with training was more complex: by the late-1980s, that was more common among low attainers than among high attainers, and in that sense training may be said to have successfully compensated for low attainment at school. But this contribution of training was only after a long period (in the late-1970s and early 1980s) when it did not play such a role, and in any case was confined to short training, mainly government schemes to compensate for unemployment. The inadequacy of many of the schemes which we have included under that heading was noted by critics at the time (a debate summarised by, for example, Fairley (1989), Jones (1988), Raffe (1984) and Roberts, Dench, and Richardson (1986)). Entry to long training, such as apprenticeships, reinforced the disparities of attainment that had arisen at school, a pattern that was similar to that for entering post-school education.

On our second question, there was no evidence that the ending of selection into different kinds of secondary school had any particular effect on transitions to education, or employment with or without training. If anything, indeed, the strongest effects were from schools that were the last to reform, but these also had had similarly beneficial effects in the old selective system. Moreover, the effects of school reform were much weaker than the effects of attainment, or of socio-economic status: the chi-squared values in Table A2, corresponding to the reform categories, were all much less than most of the values corresponding to the terms shown in Table A1. Nevertheless, there was some evidence that the schools which were the last to end selection were better able to take advantage of the new, short training opportunities in the 1980s. One possible explanation is that these schools, rethinking their courses in a non-selective way in the late-1970s and early 1980s, were doing so in the same context of the rapid rise in youth unemployment as caused government to develop new training schemes. By contrast, the earliest comprehensive schools, ending selection a decade previously, had less reason to make fundamental changes for their newly diverse school leavers. These early reformers then caught up with the late reformers when the short training schemes declined (as is seen in Figure 3), but were not leaders in coming to terms with the unprecedented challenges of unemployment.

Reform to curriculum may have had a greater effect than ending selection, which answers our third question. There was evidence that the schools which pioneered the transition to the new Standard Grade courses may have increased the proportions entering employment with or without training among low-SES students who had relatively high attainment. Because this effect was found, to some extent, even for entry to long training, it may have been a more sustainable impact than had been ending selection. The Standard Grade reforms themselves may be interpreted as one aspect of the policy response to the growth in youth unemployment, even though, far from being deliberately vocational, they were in fact an attempt to extend a liberal curriculum to everyone. So these reforms extended general attainment as a direct means of increasing school leavers' chances in the labour market. Unlike with the ending of selection, the timing ensured that

the schools which adopted Standard Grade first were doing so in the context of persisting high unemployment, and so would be most aware of any potential contribution which the new curriculum might make to school leavers' prospects. But that characterisation is not enough, because employment with short training became an important destination for people who had not attained highly in the general course. Low-attaining students did seem to benefit from the growth of mainly vocational, low-level courses alongside the core reforms – the National Certificate modules after 1984 – and continued to do so in the late-1990s, well after the Standard Grade reforms had been completed. On the other hand, as Jones (1988) noted, the very fact that what we have called 'short training' was entered by people with low-level courses from school tended to cause this training to be seen as being of low status. That kind of training might then be seen as a diversion of low-attaining school leavers away from worthwhile opportunities.

These results are consistent with both bodies of prior research that were summarised earlier. On the one hand, comprehensive schooling's extension of meaningful courses and assessment to a much wider range of students than in the previous system is reflected here in the growing importance of school attainment not only for gaining access to post-school education but also for entry to longer programmes of training or to employment. Changing levels of attainment were particularly important for students of low social status, and (to some extent at all social levels) females. On the other hand, the changes in schools can be seen in this analysis to have been an important part of the policy response to youth unemployment. Relatively high attainment at school became an increasingly important route into a post-school destination that might lead to stable employment. In that sense, our analysis is consistent with previous research which shows the increasing importance of credentials that accompanied the expansion of comprehensive schooling and the collapse of the youth labour market in the 1980s: as Heath and Cheung (1998, 73) put it, 'credentialism … replaced school type as the basic principle of educational stratification in the comprehensive era'. But the analysis also shows that the expansion of vocational training in the 1980s was complementary to these school reforms. Employment with training was more likely to be entered by school leavers who had relatively low attainment, but this compensatory effect was confined to short training, mainly in the government training schemes that were widely criticised at the time as being inadequate. Access to employment with training did not compensate for the rise of unemployment that was caused by cyclical economic change – the recession of the 1970s and early 1980s – but at best may have helped to compensate for the structural changes that persisted through the economic recovery after that date. In a labour market from the late-1980s onwards where the service sector was expanding and manufacturing was declining, young people could strengthen their competitive advantage only by acquiring credentials after leaving school, whether in formal education or in lengthy training courses.

This complementarity of schools and longer types of training was argued at the time by Raffe (1985) in a prescient discussion of the new vocational modules that were introduced from the mid-1980s. The preference of the education systems of the UK for general education over vocational training has often been seen as a failure to prepare school leavers for employment. Scotland's predilection for general education has been especially strong, and the Standard Grade reforms of the 1980s ensured that Scottish comprehensive schooling at that time would be liberal rather than vocational. The analysis presented here might suggest that the implied dichotomy between academic and vocational preparation is too stark. Even in the depth of the recession of the 1980s, school leavers' opportunities were being shaped by the expansion of general education in the newly comprehensive schools rather more than by the training opportunities which were being offered beyond school, because these were mainly short rather than long. In that sense, the effects of comprehensive schooling were not so much in the specific ending of selection or even in the specific reforms to courses and assessment, but rather in the increase in general educational participation which it accompanied and probably encouraged. The analysis reported here suggests, then, that if we are to understand how a new labour market for young people was created after the 1980s, we

need to take into account, not only vocational training and policy on the labour market, but also schools and policy on the general curriculum.

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Notes on contributor

Lindsay Paterson is professor of education policy at Edinburgh. His main research interests are in using large-scale social surveys to understand the process of educational expansion in the past century.

ORCID

Lindsay Paterson http://orcid.org/0000-0002-2745-3531

References

Aitkin, M., B. Francis, J. Hinde, and R. Darnell. 2009. *Statistical Modelling in R*. Oxford: Oxford University Press.

Allmendinger, J. 1989. "Educational Systems and Labor Market Outcomes." *European Sociological Review* 5 (3): 231–250. doi:10.1093/oxfordjournals.esr.a036524.

Arum, R., and Y. Shavit. 1995. "Secondary Vocational Education and the Transition from School to Work." *Sociology of Education* 68 (3): 187–204. doi:10.2307/2112684.

Ball, S. 1990. *Politics and Policy Making in Education*. London: Routledge.

Broadberry, S.N. 1994. "Why Was Unemployment in Postwar Britain so Low?" *Bulletin of Economic Research* 46 (3): 241–261. doi:10.1111/j.1467-8586.1994.tb00590.x.

Bynner, J. 1999. "New Routes to Employment: Integration and Exclusion." In *From Education to Work: Cross National Perspectives*, edited by W. Heinz, 65–86. Cambridge: Cambridge University Press.

Bynner, J. 2012. "Policy Reflections Guided by Longitudinal Study, Youth Training, Social Exclusion, and More Recently NEET." *British Journal of Educational Studies* 60 (1): 39–52. doi:10.1080/00071005.2011.650943.

Bynner, J., P. Elias, A. McKnight, H. Pan, and G. Pierre. 2002. *Young People's Changing Routes to Independence*. York: Joseph Rowntree Foundation.

Bynner, J., and S. Parsons. 2001. "Qualifications, Basic Skills and Accelerating Social Exclusion." *Journal of Education and Work* 14 (3): 279–291. doi:10.1080/13639080120086102.

Chisholm, L. 1999. "From Systems to Networks: The Reconstruction of Youth Transitions in Europe." In *From Education to Work: Cross National Perspectives*, edited by W. Heinz, 298–318. Cambridge: Cambridge University Press.

Crawford, C., K. Duckworth, A. Vignoles, and G. Wyness. 2011. *Young People's Education and Labour Market Choices Aged 16/17 to 18/19*. London: Department for Education.

Croxford, L. 1994. "Equal Opportunities in the Secondary School Curriculum in Scotland." *British Educational Research Journal* 20 (4): 371–391. doi:10.1080/0141192940200402.
Croxford, L. 2015. "Inequalities." In *Everyones Future: Lessons from Fifty Years of Scottish Comprehensive Schooling*, edited by D. Murphy, L. Croxford, C. Howieson, and D. Raffe, 110–138. London: IoE Press.
Croxford, L., C. Iannelli, and M. Shapira. 2007. *Documentation of the Youth Cohort Time-Series Datasets*. UK Data Archive. Study Number 5765. Colchester: UK Data Archive.
Dearden, L., L. McGranahan, and B. Sianesi. 2004. *An In-Depth Analysis of the Returns to National Vocational Qualifications Obtained at Level 2*. London: Centre for the Economics of Education, London School of Economics.
Dolton, P.J., G.H. Makepeace, and J.G. Treble. 1994. "The Youth Training Scheme and the School-to-work Transition." *Oxford Economic Papers* 46 (4): 629–657. doi:10.1093/oxfordjournals.oep.a042151.
Egerton, M., and M. Savage. 2000. "Age Stratification and Class Formation: A Longitudinal Study of the Social Mobility of Young Men and Women, 1971-1991." *Work, Employment and Society* 14 (1): 23–49.
Eurydice. 1997. *Measures Taken in the Member States of the European Union to Assist Young People Who Have Left the Education Eystem without Qualifications*. Brussels: Eurydice.
Fairley, J. 1989. "An Overview of the Development and Growth of the MSC in Scotland." In *The Manpower Services Commission in Scotland*, edited by A. Brown and J. Fairley, 34–70. Edinburgh: Edinburgh University Press.
Furlong, A., and F. Cartmel. 2007. *Young People and Social Change: New Perspectives*. second ed. Maidenhead: McGraw-Hill.
Gamoran, A. 1996. "Curriculum Standardisation and Equality of Opportunity in Scottish Secondary Education, 1984-1990." *Sociology of Education* 69 (1): 1–21. doi:10.2307/2112720.
Gangl, M., W. Müller, and D. Raffe. 2003. "Conclusions: Explaining Cross-national Differences in School-to-work Transitions." In *Transitions from Education to Work in Europe*, edited by W. Müller and M. Gangl, 277–305. Oxford: Oxford University Press.
Gray, J., A. McPherson, and D. Raffe. 1983. *Reconstructions of Secondary Education*. London: Routledge and Kegan Paul.
Hannan, D., B. Hövels, S. Van Den Berg, and M. White. 1995. "'Early Leavers' from Education and Training in Ireland, the Netherlands and the United Kingdom." *European Journal of Education* 30 (3): 325–346. doi:10.2307/1503720.
Hasluck, C. 1999. *Employers, Young People and the Unemployed: A Review of Research*. London: Employment Service.
Heath, A., and S.Y. Cheung. 1998. "Education and Occupation in Britain." In *From School to Work. A Comparative Study of Educational Qualifications and Occupational Destinations*, edited by Y. Shavit and W. Muller, 71–101. Oxford: Clarendon Press.
Howieson, C., and C. Iannelli. 2008. "The Effects of Low Attainment on Young People's Outcomes at Age 22–23 in Scotland." *British Educational Research Journal* 34 (2): 269–290. doi:10.1080/01411920701532137.
Howieson, C., D. Raffe, K. Spours, and M. Young. 1997. "Unifying Academic and Vocational Learning: The State of the Debate in England and Scotland." *Journal of Education and Work* 10 (1): 5–35. doi:10.1080/1363908970100101.
Iannelli, C. 2007. "Inequalities in Entry to Higher Education: A Comparison over Time between Scotland and England and Wales." *Higher Education Quarterly* 61 (3): 306–333. doi:10.1111/j.1468-2273.2007.00357.x.
Iannelli, C., and A. Duta. 2018. "Inequalities in School Leavers' Labour Market Outcomes: Do School Subject Choices Matter?" *Oxford Review of Education* 44 (1): 56–74. doi:10.1080/03054985.2018.1409970.
Jones, I. 1988. "An Evaluation of YTS." *Oxford Review of Economic Policy* 4 (3): 54–71. doi:10.1093/oxrep/4.3.54.
Kerckhoff, A.C., K.R. Fogelman, D. Crook, and D.A. Reeder. 1996. *Going Comprehensive in England and Wales*. London: Woburn.
Main, B.G.M., and M. Shelly. 1988. "Does It Pay Young People to Go on YTS?" In *Education and the Youth Labour Market*, edited by D. Raffe, 147–161. Lewes: Falmer.
McPherson, A., and C.D. Raab. 1988. Governing Education. Edinburgh: Edinburgh University Press
McPherson, A., and J.D. Willms. 1987. "Equalisation and Improvement: Some Effects of Comprehensive Reorganisation in Scotland." *Sociology* 21 (4): 509–539. doi:10.1177/0038038587021004003.
Mood, C. 2010. "Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do about It." *European Sociological Review* 26 (1): 67–82. doi:10.1093/esr/jcp006.
Moulton, V., A. Sullivan, M. Henderson, and J. Anders. 2018. "Does What You Study at Age 14–16 Matter for Educational Transitions Post-16?" *Oxford Review of Education* 44 (1): 94–117. doi:10.1080/03054985.2018.1409975.
Müller, W., and Y. Shavit. 1998. "The Institutional Embeddedness of the Stratification Process." In *From School to Work. A Comparative Study of Educational Qualifications and Occupational Destinations*, edited by Y. Shavit and W. Muller, 1–48. Oxford: Clarendon Press.
Murphy, D., L. Croxford, C. Howieson, and D. Raffe., eds. 2015. *Everyone's Future: Lessons from Fifty Years of Scottish Comprehensive Schooling*. London: IoE Press.
Paterson, L., A. Pattie, and I.J. Deary. 2010. "Post-school education and social class destinations in Scotland in the 1950s." *Longitudinal and Life Course Studies* 1, 371–93. doi:10.14301/llcs.v1i4.132.
Paterson, L. 2015. *Social Radicalism and Liberal Education*. Exeter: Imprint Academic.
Paterson, L. 2020a. "Curriculum and opportunity in Scottish secondary education: a half-century of expansion and inequality." *Curriculum Journal*. doi:10.1002/curj.55.

Paterson, L. 2020b. "Schools, policy and social change: Scottish secondary education in the second half of the twentieth century." *Research Papers in Education.* doi:10.1080/02671522.2020.1849370.
Paterson, L., and D. Raffe. 1995. "'Staying On' in Full Time Education in Scotland, 1985 1991." *Oxford Review of Education* 21 (1): 3–23. doi:10.1080/0305498950210101.
Paterson, L., F. Bechhofer, and D. McCrone. 2004. *Living in Scotland: Social and Economic Change since 1980*. Edinburgh: Edinburgh University Press.
Raffe, D. 1984. "Youth Unemployment and the MSC: 1977-1983." In *Scottish Government Yearbook 1984*, edited by D. McCrone, 188–222. Edinburgh: Unit for the Study of Government in Scotland.
Raffe, D. 1985. "The Extendable Ladder: Scotland's 16-plus Action Plan." *Youth and Policy* 12 (Spring): 27–33.
Roberts, K., S. Dench, and D. Richardson. 1986. "Firms' Uses of the Youth Training Scheme." *Policy Studies* 6 (3): 37–53. doi:10.1080/01442878608423450.
Shelly, M. 1988. "Has the Bottom Dropped Out of the Youth Labour Market?" In *Education and the Youth Labour Market*, edited by D. Raffe, 100–116. Lewes: Falmer.
Smyth, E. 2005. "Gender Differentiation and Early Labour Market Integration across Europe." *European Societies* 7 (3): 451–479. doi:10.1080/14616690500194084.
Solga, H. 2008. "Lack of Training: Employment Opportunities for Low-skilled Persons from a Sociological and Microeconomic Perspective." In *Skill Formation: Interdisciplinary and Cross-National Perspectives*, edited by K. Mayer, 173–204. Cambridge: Cambridge University Press.
Wolbers, M.H.J. 2003. "Learning and Working: Double Statuses in Youth Transitions." In *Transitions from Education to Work in Europe*, edited by W. Müller and M. Gangl, 131–155. Oxford: Oxford University Press.